

ORDER FOR SUPPLIES OR SERVICES										PAGE 1 OF 19	
1. CONTRACT/PURCH. ORDER/ AGREEMENT NO. N65540-15-D-0005			2. DELIVERY ORDER/ CALL NO. N6449819FBB30		3. DATE OF ORDER/CALL (YYYYMMDD) 2019 Jun 11		4. REQ./ PURCH. REQUEST NO. 1300780464		5. PRIORITY		
6. ISSUED BY NAVAL SURFACE WARFARE CENTER PHILA (b) (6)(b) (6)(b) (6)(b) (6)(b) (6) (b) (6)(b) (6)(b) (6)(b) (6)(b) (6)(b) (6) 5001 SOUTH BROAD STREET PHILADELPHIA PA 19112			CODE N64498		7. ADMINISTERED BY (if other than 6) DCMA HAMPTON 2128 PERSHING AVENUE FORT EUSTIS VA 23604			CODE S6111A		8. DELIVERY FOB <input type="checkbox"/> DESTINATION <input checked="" type="checkbox"/> OTHER (See Schedule if other)	
9. CONTRACTOR GENERAL DYNAMICS INFORMATION TECHNOLOGY, NAME 3211 JERMANTOWN RD AND ADDRESS FAIRFAX VA 22030-2844			CODE 07MU1		FACILITY		10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) SEE SCHEDULE		11. MARK IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED		
12. DISCOUNT TERMS			13. MAIL INVOICES TO THE ADDRESS IN BLOCK See item 15								
14. SHIP TO NAVAL SURFACE WARFARE CENTER PHILA (b) (6)(b) (6)(b) (6)(b) (6) NSWC PHILADELPHIA DIVISION 1601 LANGLEY AVENUE BLDG 542 PHILADELPHIA PA 19112			CODE N64498		15. PAYMENT WILL BE MADE BY DFAS COLUMBUS CENTER, SOUTH ENTITLEMENT O P.O. BOX 182264 COLUMBUS OH 43218-2264			CODE HQ0338		MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.	
16. TYPE OF ORDER		DELIVERY/ CALL		<input checked="" type="checkbox"/>		This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.					
		PURCHASE		<input type="checkbox"/>		Reference your quote dated Furnish the following on terms specified herein. REF:					
ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.											
NAME OF CONTRACTOR			SIGNATURE			TYPED NAME AND TITLE			DATE SIGNED (YYYYMMDD)		
<input type="checkbox"/> If this box is marked, supplier must sign Acceptance and return the following number of copies:											
17. ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE See Schedule											
18. ITEM NO.		19. SCHEDULE OF SUPPLIES/ SERVICES				20. QUANTITY ORDERED/ ACCEPTED*		21. UNIT		22. UNIT PRICE	
		SEE SCHEDULE								23. AMOUNT	
		SEE SCHEDULE									
* If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.		24. UNITED STATES OF AMERICA (b) (6)(b) (6)(b) (6)(b) (6) (b) (6)(b) (6)(b) (6)(b) (6)(b) (6) (b) (6)(b) (6)(b) (6)(b) (6)(b) (6)				(b) (6)		CONTRACTING / ORDERING OFFICER		25. TOTAL \$448,278.78	
27a. QUANTITY IN COLUMN 20 HAS BEEN		<input type="checkbox"/> INSPECTED <input type="checkbox"/> RECEIVED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED								26. DIFFERENCES	
b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE						c. DATE (YYYYMMDD)		d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE			
e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE						28. SHIP NO.		29. DO VOUCHER NO.		30. INITIALS	
f. TELEPHONE NUMBER		g. E-MAIL ADDRESS				<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		32. PAID BY		33. AMOUNT VERIFIED CORRECT FOR	
38. I certify this account is correct and proper for payment.						31. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL				34. CHECK NUMBER	
a. DATE (YYYYMMDD)		b. SIGNATURE AND TITLE OF CERTIFYING OFFICER								35. BILL OF LADING NO.	
37. RECEIVED AT		38. RECEIVED BY		39. DATE RECEIVED (YYYYMMDD)		40. TOTAL CONTAINERS		41. S/R ACCOUNT NO.		42. S/R VOUCHER NO.	

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003	Engineering and Support Services CPFF				
				ESTIMATED COST	
				FIXED FEE	
				TOTAL EST COST + FEE	
ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003AA	Funding for CLIN 0003 CPFF 10 U.S.C. 2410(a) is hereby invoked. Funding available for performance through one (1) year from date of award. Fully Funded at the time of award. FOB: Destination PURCHASE REQUEST NUMBER: 1300790464 PSC CD: R425	1	Lot		
				ESTIMATED COST	
				FIXED FEE	
				TOTAL EST COST + FEE	
	ACRN AA CIN: 130079046400001				
ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004	Support Costs COST				
				ESTIMATED COST	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004AA	Funding for CLIN 0004 COST 10 U.S.C. 2410(a) is hereby invoked. Funding available for performance through one (1) year from date of award. Fully Funded at the time of award. FOB: Destination PURCHASE REQUEST NUMBER: 1300790464 PSC CD: R425	1	Lot		
	ACRN AA CIN: 130079046400002			ESTIMATED COST	

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005	Technical Data FFP CDRLs FOB: Destination PSC CD: R425	1	Lot		

NET AMT

Section C - Descriptions and Specifications

STATEMENT OF WORK

**STATEMENT OF WORK
INSTALLATION SERVICES FOR SHIPS MODERNIZATION AND
TECHNICAL ADVANCEMENT**

1. SCOPE

- 1.1. Naval Surface Warfare Center, Philadelphia Division (NSWCPD), Codes 516 as In-Service Engineering Agents (ISEAs) for ship systems are tasked with providing engineering and System testing and installation support for the design and installation of Ship Modernization Technologies. The objective of this contract is to obtain installation services to support NSWCPD implementation, and testing of Ship Change Documents (SCD) and other Machinery Control System alterations for US Navy LSD class ships related to the following:

- 1.1.1. Propulsion Load Management Unit (PLMU)
- 1.1.2. Advanced Engineering Control System (AECS)
 - 1.1.2.1. Machinery Control System (MCS) SCD-16380
 - 1.1.2.2. Ballast Control System (BCS) – SCD 23207
 - 1.1.2.3. Damage Control System (DCS) – SCD 23209

2. Ship Installation Drawing References

- 2.1. LSD 41/49 Class Standard References
 - 2.1.1. Miscellaneous Electrical Equipment Foundations (Shock) 113-5293062
 - 2.1.2. Cable Installation Requirements 302-5302690
 - 2.1.3. Penetrations Surface Ships 101-5317400
 - 2.1.4. Typical TVSS Installation Methods 302-7539827
 - 2.1.5. Cable Entry Enclosure 321-8336628
 - 2.1.6. Electric Plant Installation Modification Methods 302-4326297
- 2.2. SCD 16380 (MCS Tech Refresh) Ship Installation Drawings
 - 2.2.1. Rack Drawer Install Drawing NWSC-SPC-011C
 - 2.2.2. NEMA Enclosure Install Drawing NWSC-SPC-012C
 - 2.2.3. Pedestal Plate Install Drawing 1171RS0003
 - 2.2.4. LSD47 MCS Tech Refresh Foundation Modifications, #183-8680831
 - 2.2.5. LSD47 MCS Tech Refresh Block Wiring Diagram, #438-8686043
 - 2.2.6. LSD47 Power System Modifications MCS Tech Refresh, #321-8686133
 - 2.2.7. LSD47 Central Control Station CCS MCS Tech Refresh Arrangement, #501-8678908
 - 2.2.8. LSD47 AUX1 and MMR1 MCS Tech Refresh Arrangement, #201-8685220
 - 2.2.9. LSD47 Lighting System Modifications MCS Tech Refresh, #331-8686157
 - 2.2.10. LSD47 AECS LAN Modifications MCS Tech Refresh, #415-8686387
 - 2.2.11. LSD47 Circuit 10AV Modifications MCS Tech Refresh, #436-8686497
- 2.3. SCD 23207 (BCS Tech Refresh) Ship Installation Drawings
 - 2.3.1. Pedestal Plate Install Drawing 1171RS0003
 - 2.3.2. LSD47 BCS Tech Refresh Foundation Modifications, #183-8620959
 - 2.3.3. LSD47 BCS Tech Refresh, #438-8686579
 - 2.3.4. LSD47 Power System Modifications Incidental to BCS Tech Refresh, #321-8686788
- 2.4. SCD 23209 (DCS Tech Refresh) Ship Installation Drawings
 - 2.4.1. NEMA Enclosure Install Drawing NWSC-SPC-012C
 - 2.4.2. Pedestal Plate Install Drawing 1171RS0003
 - 2.4.3. LSD47 DCS Tech Refresh, #438-8686580
 - 2.4.4. LSD47 Power System Modifications Incidental to DCS Tech Refresh, #321-8686789

3. REQUIREMENTS

3.1. General Services

3.1.1. Provide to NSWCPD the following support and services for the tasking listed in this statement of work.

3.1.1.1. Provide materials as identified in this document when accomplishing installation services in support of the tasking identified in this statement of work.

3.1.1.2. Ship equipment and materials to or from ship's home ports for installation.

3.1.1.3. Provide fiber optic cable assembly installation and test services, as required herein, in accordance with MIL-STD-2042C.

3.1.1.3.1. Fiber optic installers, supervisors, and Quality Assurance (QA) personnel shall meet Navy shipboard personnel proficiency requirements identified in MIL-STD-1678-1, Requirement 1306 for all fiber optic installations, modifications, and repairs.

3.2. LSD 41/49 Class systems

3.2.1. Propulsion Load Management Unit (PLMU) S/A 1338K.

3.2.1.1. Provide installation support for the integration of the Propulsion Load Management Unit (PLMU) and the Advanced Engineering Control System (AECS) on LSD-44 and LSD-47. The PLMU is a proprietary SLC500 series Programmable Logic Controller (PLC) based system designed and installed by Rolls Royce Naval Marine Inc., (RRNMI). The PLMU is currently installed on eleven LSD Class ships.

3.2.1.1.1. The contractor shall provide support for tech refresh installation, testing, and training for the PLMU system on-board LSD Class ships including pre and post tech refresh support.

3.2.1.2. The contractor shall estimate support for two ship visits from Rolls Royce Naval Marine Inc., (RRNMI) representative consisting of ten days each to include the following locations: Norfolk, VA (1), San Diego (1).

3.2.2. Machinery Control System (MCS)

3.2.2.1. Provide installation support for the Advanced Engineering Control System (AECS) on LSD Class ships. The AECS is comprised of a Machinery Control System (MCS), Ship Control System (SCS) and a Local Area Network (LAN). Both MCS and SCS are Allen-Bradley Control Logix Programmable Logic Controller (PLC) based systems with a computer based Human Machine Interface (HMI) that operates over a LAN. The HMI equipment for the AECS MCS is a combination of Intergraph ruggedized consoles/workstations (10) and Operator Interface Panel (OIP) compact industrial workstations (3).

3.2.2.2. Provide services for installation of LSD Midlife MCS HW Tech Refresh, SCD 16380. A technical refresh of LSD Midlife is comprised of the following modifications to AECS MCS:

3.2.2.2.1. MCS Hardware Equipment Removals on LSD47

3.2.2.2.1.1. Equipment Rack Removals

3.2.2.2.1.1.1. Remove equipment rack to include the foundation from

3.2.2.2.1.1.1.1. CCS.

3.2.2.2.1.1.2. Remove internal legacy components from the equipment rack to include monitor, keyboard, and computer assemblies. Foundation and rack to stay intact from:

3.2.2.2.1.1.2.1. Engineering Log Room

3.2.2.2.1.1.2.2. CCS

3.2.2.2.1.1.3. Reference Drawings 2.2.1, 2.2.8, 2.2.9, 2.2.10, 2.2.11

3.2.2.2.1.2. NEMA Workstation Removals

3.2.2.2.1.2.1. Remove legacy NEMA workstation equipment with foundations in the below spaces.

3.2.2.2.1.2.1.1. AUX1 EOS

3.2.2.2.1.2.1.2. MMR1 EOS

3.2.2.2.1.2.1.3. MMR2 EOS

3.2.2.2.1.2.2. Remove internal legacy components from NEMA workstation to include monitor, keyboard, and computer assemblies. Foundation and rack to stay intact from:

3.2.2.2.1.2.2.1. MMR1 Lower Level

3.2.2.2.1.2.2.2. MMR2 Lower Level

3.2.2.2.1.2.2.3. AUX2 EOS

3.2.2.2.1.2.3. Reference Drawings 2.2.2, 2.2.8, 2.2.9, 2.2.10

3.2.2.2.1.3. Operator Interface Panel (OIP) Removals

3.2.2.2.1.3.1. Remove Daisy Data OIP computer assembly to include foundation from:

3.2.2.2.1.3.1.1. CCS

3.2.2.2.1.3.2. Remove Daisy Data OIP computer assembly. Foundation to stay intact from:

3.2.2.2.1.3.2.1. Pilot House

3.2.2.2.1.3.3. Reference Drawings 2.2.8, 2.2.9, 2.2.10.

3.2.2.2.2. MCS Hardware Installations on LSD 47

3.2.2.2.2.1. Operator Interface Panel (OIP) Installations

3.2.2.2.2.1.1. Replacement of Daisy Data OIP for a NAG OIP. There are three of these systems aboard each ship.

3.2.2.2.2.1.1.1. Pilot House

3.2.2.2.2.1.2. Reference Drawings 2.2.8, 2.2.9, 2.2.10.

3.2.2.2.2.2. NEMA Workstation Stand-up Style Console Installations

3.2.2.2.2.2.1. Replacement of NEMA workstation enclosure for stand-up style console with a NEMA enclosure containing a sealed PC.

3.2.2.2.2.2.2. Replacement of legacy monitor/keyboard/trackball assembly for stand-up console with new monitor/keyboard/trackball assembly.

3.2.2.2.2.2.3. There are three of these systems aboard each ship.

- 3.2.2.2.2.3.1. MMR1 Lower Level
- 3.2.2.2.2.3.2. MMR2 Lower Level
- 3.2.2.2.2.3.3. AUX2 EOS
- 3.2.2.2.2.4. Reference Drawings 2.2.2, 2.2.8, 2.2.9, 2.2.10

3.2.2.2.3. Pedestal Sit Down Style Console Installation

- 3.2.2.2.3.1. Replacement of monitor/keyboard/trackball assembly on pedestal style console.
- 3.2.2.2.3.2. Modify lower section of pedestal console to add a shelf and mount a sealed computer system on shelf.
- 3.2.2.2.3.3. Install internal cabling to support sealed computer system.
- 3.2.2.2.3.4. There are five of these systems aboard each ship.
 - 3.2.2.2.3.4.1. CCS 2ea
 - 3.2.2.2.3.4.2. MMR1 EOS 1ea
 - 3.2.2.2.3.4.3. MMR2 EOS 1ea
 - 3.2.2.2.3.4.4. AMR1 EOS 1ea
- 3.2.2.2.3.5. Reference Drawings 2.2.3, 2.2.8, 2.2.9, 2.2.10

3.2.2.2.4. Equipment Rack Drawer Unit Installation

- 3.2.2.2.4.1. Replace two rack mounted computers and replace with sealed PC mounted on 2U shelf.
- 3.2.2.2.4.2. Replace two rack mounted monitor/keyboard units with new units.
- 3.2.2.2.4.3. Install internal cabling to support sealed computer system and monitors.
- 3.2.2.2.4.4. There are two of these racks with drawer units in each onboard.
 - 3.2.2.2.4.4.1. CCS 3 ea
 - 3.2.2.2.4.4.2. Eng Log Room 2 ea
- 3.2.2.2.4.5. Drawing Reference 2.2.1, 2.2.8, 2.2.9, 2.2.10, 2.2.11

3.2.2.2.5. Remove fiber optic network cables for Network Management Station and replace with Cat5e cable back to network switches from the unit installed in CCS IAW Drawing Reference 2.2.10.

3.2.2.2.6. Re-tag AECS-LAN cables and provide updated Nameplates IAW Drawing Reference 2.2.10.

3.2.2.3. LSD-47 installation is scheduled for FY19/FY20. Start of availability is 6 May 2019.

3.2.2.3.1. Installation location to be in San Diego, CA.

3.2.2.3. Provide installation support for addressing system discrepancies discovered during installation and post deployment phases of the alteration.

3.2.2.3.1. AECS Programmable Logic Controllers and input/output devices connected to the controllers.

3.2.2.3.2. AECS Human Machine Interfaces (HMI).

3.2.2.3.3. Ship is home based in San Diego, CA.

3.2.2.3.4. Contractor shall estimate support to San Diego, CA for this effort.

3.2.2.4. Contractor shall anticipate providing the following material in support of each MCS SCD 16380 Installation:

3.2.2.4.1. Fluke 725 Process Calibrators, Qty 2.

3.2.2.4.2. Fuel rack transmitters, p/n P1261942, Qty 4.

3.2.2.4.3. Magnetic speed pickup, AI-TEK p/n 70085-1010-054, Qty 8.

3.2.2.4.4. Shaft Speed Transducer AI-TEK part # RH1522-005, Qty 4.

3.2.2.4.5. Pitch Transmitter, p/n 75S2DC-6500SR, Qty 2

3.2.2.4.6. Axiomatic signal conditioners, p/n IC-DR-16, Qty 4.

3.2.3. Ballast Control System (BCS) – LSD 47

3.2.3.1. Provide installation support for the Ballast Control System (BCS) on the LSD 47. The BCS is an Allen-Bradley PLC-5 Programmable Logic Controller (PLC) based system with a computer based Human Machine Interface (HMI) that operates over a LAN. The HMI equipment for the BCS consists of Intergraph ruggedized consoles (2).

3.2.3.2. Provide services for installation of LSD 47 BCS Tech Refresh, SCD 23207. A technical refresh is comprised of the following modifications to BCS:

3.2.3.2.1. BCS Hardware Equipment Removals on LSD47

3.2.3.2.1.1. Equipment Rack Removal

3.2.3.2.1.1.1. Remove equipment rack to include the foundation from

3.2.3.2.1.1.1.1. Ballast Control Central

3.2.3.2.1.1.2. Reference Drawings 2.3.1, 2.3.2, 2.3.3, 2.3.4

3.2.3.2.2. BCS Hardware Installations on LSD 47

3.2.3.2.2.1. Pedestal Sit Down Style Console Installation

3.2.3.2.2.1.1. Replacement of monitor/keyboard/trackball assembly on pedestal style console.

3.2.3.2.2.1.2. Modify lower section of pedestal console to add a shelf and mount a sealed computer system on shelf.

3.2.3.2.2.1.3. Install internal cabling to support sealed computer system.

3.2.3.2.2.1.4. There are two of these systems aboard the LSD 47.

3.2.3.2.2.1.4.1. Ballast Control Central 2ea

3.2.3.2.2.1.5. Reference Drawings 2.3.1, 2.3.2, 2.3.3, 2.3.4

3.2.3.2.3. LSD-47 installation is scheduled for FY19/FY20. Start of availability is 6 May 2019.

3.2.3.2.3.1. Installation location to be in San Diego, CA.

3.2.3.2.3.2. Contractor shall estimate support to San Diego, CA for this effort.

3.2.4. Damage Control System (DCS) – LSD 47

3.2.4.1. Provide installation support for the Damage Control System (DCS) on the LSD 47. The DCS is an Allen-Bradley PLC-5 Programmable Logic Controller (PLC) based system with a computer based Human Machine Interface (HMI) that operates over a LAN. The HMI equipment for the DCS consists of Intergraph ruggedized consoles/workstations (5).

3.2.4.2. Provide services for installation of LSD 47 DCS Tech Refresh, SCD 23209. A technical refresh is comprised of the following modifications to DCS:

3.2.4.2.1. DCS Hardware Equipment Removals on LSD47

3.2.4.2.1.1. NEMA Workstation Removals

3.2.4.2.1.1.1. Remove internal legacy components from NEMA workstation to include monitor, keyboard, and computer assemblies. Foundation and rack to stay intact from:

3.2.4.2.1.1.1.1. Damage Control Repair Station (DCRS) 2

3.2.4.2.1.1.1.2. Damage Control Repair Station (DCRS) 3

3.2.4.2.1.1.1.3. Damage Control Repair Station (DCRS) 5

3.2.4.2.1.1.2. Reference Drawings 2.4.1, 2.4.2, 2.4.3, 2.4.4

3.2.4.2.2. DCS Hardware Installations on LSD 47

3.2.4.2.2.1. NEMA Workstation Stand-up Style Console Installations

3.2.4.2.2.1.1. Replacement of legacy monitor/keyboard/trackball assembly for stand-up console with new monitor/keyboard/trackball assembly.

3.2.4.2.2.1.2. There are three of these systems aboard the LSD 47.

3.2.4.2.2.1.2.1. Damage Control Repair Station (DCRS) 2

3.2.4.2.2.1.2.2. Damage Control Repair Station (DCRS) 3

3.2.4.2.2.1.2.3. Damage Control Repair Station (DCRS) 5

3.2.4.2.2.1.3. Reference Drawings 2.4.1, 2.4.2, 2.4.3, 2.4.4

3.2.4.2.2.2. Pedestal Sit Down Style Console Installation

3.2.4.2.2.2.1. Replacement of monitor/keyboard/trackball assembly on pedestal style console.

3.2.4.2.2.2.2. Modify lower section of pedestal console to add a shelf and mount a sealed computer system on shelf.

3.2.4.2.2.2.3. Install internal cabling to support sealed computer system.

3.2.4.2.2.2.4. There are two of these systems aboard the LSD 47.

3.2.4.2.2.2.4.1. CCS 2ea

3.2.4.2.2.2.5. Reference Drawings 2.2.4, 2.2.5, 2.2.6, 2.2.7

3.2.4.2.3. LSD-47 installation is scheduled for FY19/FY20. Start of availability is 6 May 2019.

3.2.4.2.3.1. Installation location to be in San Diego, CA.

4 APPLICABLE DOCUMENTS/REFERENCES

The following instructions and standards are not all inclusive:

- 4.1 MIL-STD-2042B (SH) Fiber Optic Topology Installation Standard Methods for Naval Ships (Equipment/Connectors and Inter-connectors) - Validated 05/30/2007

- 4.2 NAVSEA S9AAO-AB-GOS-010/GSO, General Specifications for Overhaul of Surface Navy Ship - Version 11/30/2004 - Version 11/30/2004
- 4.3 DOD-STD-2003, Electric Plant Installation Standard Methods for Surface Ships and Submarines - Version 12/17/1990
- 4.4 MIL-STD-454, Standard General Requirements for Electronic Equipment – Version 04/15/2007
- 4.5 MIL-STD-1310 (Navy), Bonding and Grounding - Version 06/28/1996
- 4.6 OPNAV Instruction 5100.23G, Navy Occupational Safety and Health (NAVOSI-) Program Manual - Version 12/30/2005
- 4.7 Standards and Interpretations, Occupational Safety and Health Chapter I 1915.14, 1915.15 and 1915.16 - Version 12/30/2005
- 4.8 NAVSEA SL720-AA-MAN-020, FMP Management & Operations Manual – Version 06/01/2002
- 4.9 NAVSEA 9090-310D, SHIPALT by Alteration Installation Team - Version 02/2004 or later
- 4.10 NAVSSES Instruction 4720.2D, Process and Policy for Shipboard Industrial Work – Version 07/12/2007
- 4.11 MIL-STD-24749, Electrical Grounding, General Specifications - Version 08/13/1990
- 4.12 MIL-DTL-22520G, General Specification for Crimping Tools and Wire Termination – Version G, dated 09/12/1997
- 4.13 The following is a list of 478K drawing references - Hull Specific issued by Planning Yard
 - 4.13.1 7649038–478K, EPCS Upgrade Phase I local area network and Video Isometric Cabling Diagram - Hull Specific issued by Planning Yard
 - 4.13.2 7649039–478K, EPCS Upgrade Phase I local area network and Video Elementary Diagram - Hull Specific issued by Planning Yard
 - 4.13.3 7649045–478K, EPCS Upgrade Phase I circuit modifications - Hull Specific issued by Planning Yard
- 4.14 NAVSEA STANDARD ITEM 009-22 (Shipboard Electric Cable Test) - Version 07/19/2007
- 4.15 NAVSEA 0967-LP-000-0110 Electronics Installation and Maintenance Book, Installation Standards - Dated 09/01/1977
- 4.16 Government Furnished Material Lists - Hull Specific issued by Planning Yard
- 4.17 S0400-AD-URM'-010/TUM, Tag-Out Users Manual ANSI/ASQC Q9002-1994, Quality Systems, Model for Quality Assurance in Production, Installation, and Servicing – Dated 05/29/2009
- 4.18 ANSI/ISO/ASQ Q9001-2000, Quality Management Systems - Requirements – Version 11/15/2008
- 4.19 NAVSEA STANDARD ITEMS (All Category I) <http://www.supship.navy.mil/ssrac4/standard.htm>

5 DELIVERABLES

- 5.1 Progress and Financial Reports: A monthly progress and financial report will be submitted to the Subject Matter Expert (SME) with a copy to the Contracting Officer. (CDRL A001)
- 5.2 Status Reports: For any travel required, the contractor will report the destination, number of travelers, duration of stay, task milestones completed, site points of contact, ship, and hull number visited. (CDRL A002)
- 5.3 Installation Completion Report: Contractor shall immediately fax completion report to NSWCCD at the conclusion of any alteration. (CDRL A014)
- 5.4 QA Workbook 30 days prior to start of the installation. (CDRL A004)
- 5.5 Ship check report containing plant/equipment and a report of recommended repairs within five (5) working days of pre/post installation ship check completion. (CDRL A013)

6 GOVERNMENT FURNISHED MATERIAL/INFORMATION

- 6.1 NSWCPD will provide all available drawings and associated documentation.
- 6.2 NSWCPD will provide Shipboard Integrated Test Plan and Test Procedures which will be used to test functionality of all SCD installed/relocated systems or equipment.
- 6.3 NSWCPD and planning yard will provide all required GFM and GFI to complete SOW.

7 CONTRACTOR FURNISHED MATERIAL

- 7.1 For SCD 16380, provide all miscellaneous and incidental installation material identified as IAF in the installation drawings and auxiliary equipment.
- 7.2 For SCD 23207, provide all miscellaneous and incidental installation material identified as IAF in the installation drawings and auxiliary equipment.
- 7.3 For SCD 23209, provide all miscellaneous and incidental installation material identified as IAF in the installation drawings and auxiliary equipment.
- 7.4 Furnish all necessary test equipment to validate installation, testing and operation of cables, material, and equipment in the execution of this delivery order.

8 TRAVEL

- 8.1 The tasks in this solicitation will be performed at Naval Regional Maintenance Centers (RMC) San Diego and Norfolk, so the offeror will need the ability to manage manpower from the offeror's main production site as well as satellite sites throughout the country to minimize personnel travel and costs.

9 OVERTIME

- 9.1 Overtime will be required to support ship schedules and shorten pier side availabilities. Overtime will also minimize the down time of Combat Systems equipment and allow completion to support the ship's operation schedule

10 CLASSIFIED MATERIAL/INFORMATION: None

11 PERIOD OF PERFORMANCE: Date of Award through 20 March 2020.

12 COR: (b) (6)(b) (6)(b) (6)(b) (6)(b) (6)

13 TECHNICAL POINT OF CONTACT: (b) (6)(b) (6)(b) (6)(b) (6)(b) (6)

14 NSWCPD ELECTRONIC COST REPORTING AND FINANCIAL TRACKING (eCRAFT) SYSTEM

(a) The Contractor is required to upload their Contractor's Funds and Man-hour Expenditure Reports in the Electronic Cost Reporting and Financial Tracking (eCRAFT) System. The eCRAFT Reports must use the standardized labor categories identified in Section C - Statement of Work.

(b) The Contractor's Funds and Man-hour Expenditure Report reports contractor expenditures for labor, materials, travel, subcontractor usage, and other contract charges.

(c) The contractor agrees to provide supporting accounting system reports, at the Contracting Officer's request, based on the review of the invoice documentation submitted to eCRAFT. This documentation will include reports such as the Job Summary Report (or equivalent), Labor Distribution Report (or equivalent), and General Ledger Detail Report (or equivalent). Supporting labor data provided must include unburdened direct labor rates for each employee and labor category. Cost breakdowns for ODCs, Materials, travel and other non-labor costs must be at the transactional level in sufficient detail so the Government can review allocability to the contract/task order. Indirect costs allocated to direct costs must be shown at the lowest level of detail sufficient to reconcile each indirect rate to the appropriate allocation base. On invoices containing subcontractor costs, the prime contractor agrees, at the Contracting Officer's request, to attach as supporting documentation all invoices received from subcontractors, unless the subcontractor submits invoices directly to the CO and COR. This requirement applies to all subcontract types (Cost, FFP, etc.).

(d) The contractor shall submit its reports on the same day it submits an invoice in iRAPT. The costs reflected in eCRAFT shall be the same as those in iRAPT. eCRAFT acceptance/rejection will be indicated by e-mail notification from eCRAFT.

(e) The eCRAFT Periodic Report Utility (ePRU) is an Excel tool used to facilitate generating reports of expenditures-against-cost contracts. The generated XML files will then be submitted by the ePRU tool via email to NUWC_NPT_eCRAFT.FCT@navy.mil for submission into the eCRAFT Database Management System.

The ePRU spreadsheet and user manual can be obtained from the NUWC Division Newport Contracts Home Page under eCRAFT information at:

<http://www.navsea.navy.mil/Home/WarfareCenters/NUWCNewport/Partnerships/Commercial-Contracts/Information-eCraft>

15 Enterprise-Wide Contracting Manpower Reporting Application (ECMRA)

"The Contractor shall report Contractor labor hours (including subcontractor labor hours) required for performance of services provided under this contract for the [NAMED COMPONENT] via a secure data collection site. Contracted services excluded from reporting are based on Product Service Codes (PSCs). The excluded PSCs are:

(1) W, Lease/Rental of Equipment;

(2) X, Lease/Rental of Facilities;

(3) Y, Construction of Structures and Facilities;

(4) D, Automatic Data Processing and Telecommunications, IT and Telecom-
Telecommunications Transmission (D304) and Internet (D322) ONLY;

(5) S, Utilities ONLY;

(6) V, Freight and Shipping ONLY.

The Contractor is required to completely fill in all required data fields using the following web address <https://doncmra.nmci.navy.mil>.

Reporting inputs will be for the labor executed during the period of performance during each Government fiscal year (FY), which runs October 1 through September 30. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year. Contractors may direct questions to the help desk, linked at <https://doncmra.nmci.navy.mil>.

16 RELEASE OF INFORMATION

All technical data provided to the contractor by the Government and/or by the contractor for the Government shall be protected from public disclosure in accordance with the markings contained therein. All other information relating to the items being delivered or services being performed under this delivery order may not be disclosed by any means without prior approval of the authorized representative of the contracting officer. Dissemination or public disclosure includes, but is not limited to: permitting access to such information by foreign nationals or by any other persons on entity, publication or technical or scientific, advertising, or any other proposed public release. The contractor shall provide adequate physical protection to such information so as to preclude access by any person or entity not authorized such access by the Government.

Section E - Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0003	N/A	N/A	N/A	N/A
0003AA	Destination	Government	Destination	Government
0004	N/A	N/A	N/A	N/A
0004AA	Destination	Government	Destination	Government
0005	Destination	Government	Destination	Government

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	DODAAC / CAGE
0003	N/A	N/A	N/A	N/A
0003AA	POP 03-JUN-2019 TO 20-MAR-2020	N/A	NAVAL SURFACE WARFARE CENTER PHILA (b) (6)(b) (6)(b) (6)(b) (6) NSWC PHILADELPHIA DIVISION 1601 LANGLEY AVENUE BLDG 542 PHILADELPHIA PA 19112 (b) (6)(b) (6) FOB: Destination	N64498
0004	N/A	N/A	N/A	N/A
0004AA	POP 11-JUN-2019 TO 12-MAR-2020	N/A	NAVAL SURFACE WARFARE CENTER PHILA (b) (6)(b) (6)(b) (6)(b) (6) NSWC PHILADELPHIA DIVISION 1601 LANGLEY AVENUE BLDG 542 PHILADELPHIA PA 19112 (b) (6)(b) (6) FOB: Destination	N64498
0005	20-MAR-2020	1	(SAME AS PREVIOUS LOCATION) FOB: Destination	N64498

Section G - Contract Administration Data

LOE & FUNDING

The subject Level of Effort Task Order has hereby been awarded and fully funded in the amount of [REDACTED]. As a result, the total amount of funding obligated and available for payment under this order is [REDACTED]. It is estimated that the funding under this order will cover the cost of performance through 20 March 2020. In accordance with contract clause 52.232-22, Limitation of Funds, the Government is not obligated to reimburse the contractor for any costs incurred in excess of [REDACTED] unless additional funds are made available and obligated under this order in a subsequent modification.

FOIA Exemption B4 Contractor Proprietary and Private

ACCOUNTING AND APPROPRIATION DATA

AA: 1791804 8B5B 251 VU021 0 050120 2D 000000

COST CODE: A00005085248

AMOUNT: [REDACTED]

ACRN	CLIN/SLIN	CIN	AMOUNT
AA	0003AA	130079046400001	[REDACTED]
	0004AA	130079046400002	[REDACTED]

Section I - Contract Clauses**CLAUSES INCORPORATED BY REFERENCE**

52.223-18	Encouraging Contractor Policies To Ban Text Messaging While Driving	AUG 2011
52.232-18	Availability Of Funds	APR 1984
52.232-19	Availability Of Funds For The Next Fiscal Year	APR 1984
52.232-22	Limitation Of Funds	APR 1984
52.245-2	Government Property Installation Operation Services	APR 2012
252.203-7000	Requirements Relating to Compensation of Former DoD Officials	SEP 2011
252.204-7012	Safeguarding Covered Defense Information and Cyber Incident Reporting	OCT 2016
252.232-7007	Limitation Of Government's Obligation	APR 2014

Section J - List of Documents, Exhibits and Other Attachments

CDRLS

The subject CDRLs will be uploaded into EDA:

- 1) A001 – Contract Status Report
- 2) A002 – Financial Reports
- 3) A004 – QA Workbook
- 4) A013 – Pre-installation Site Survey